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10/581,150

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Marco Ronconi

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EXAMINER

CHUKWURAH, NATHANIEL C

ART UNIT

PAPER NUMBER

3721

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/581,150

Applicant(s)

RONCONI, MARCO

Examiner

Nathaniel C. Chukwurah

Art Unit

3721

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 16-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This office action is response to the amendment filed on 10/19/2007.

#### *Claim Objections*

2. Claims 29 and 30 objected to because of the following informalities: Claims 29 and 30 identified first valve means with number "2" instead of --5--. Appropriate correction is required.

#### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 16-17, 21-30 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Moraht et al. (US 4,915,013).

With regard to claim 16, the patent to Moraht et al. discloses a pneumatic fixing machine (driving tool) comprising: a piston mean (12) slidably located inside a cylinder (11); first valve means (37) movable between two extreme positions, an opening position, such that the first valve means are in fluidic communication with an inlet portion (32) of the cylinder (11) for receiving a pressurized fluid and a closing position (Fig. 1) where the first valve means are in communication with an external outlet; second valve means (61) movable in response to operation of a trigger (26), the second valve means movable between an occlusion position (Fig. 1) for fluidly connecting at least a first duct (58) and a base portion (40) of the first valve means (37) for feeding the pressurized fluid therethrough, and, a passage position (Fig. 2) for

connecting to an external outlet; third valve means (38) movable between a position of obstruction, to cut off flow between the first duct (58) and the first valve means (37), and, a crossing position (Fig. 2), which opens a flow connection between the duct (58) and the first valve means (37); fourth valve means (56 valve piston) movable in response to operation of the trigger (26), the fourth valve means movable between a block position (Fig. 2), where flow is obstructed between the cylinder (11) and the third valve means (38), and, a transit position (Fig. 4) such that flow is permitted between the cylinder (11) and the third valve means (38); wherein in a first activation condition, the trigger (26) is partially pressed, positioning the second valve means (61) in the passage position, to allow the pressurized fluid to push the first valve means (37) into the opening position (Fig. 2), actuating the piston mean (12); and wherein in a second activation condition, the trigger (26) is further and completely pressed (Fig. 4), moving the fourth valve means (56) into the transit position, to allow the pressurized fluid coming from the cylinder (11) to move the third valve means (38) into the occlusion position, causing the return of the first valve means (37) to the closing position and the consequent return of the piston mean (12) to the initial position.

With regard to claim 17, the fourth valve means (56) comprise a lengthened and shaped element, slidably housed inside a first seat (66) which is complementary shaped and in fluid communication with the cylinder (12) through a second duct (58a).

With regard to claim 21, the third valve means (38) of Moraht et al. comprises a shaped stem as shown in Figure 4, having a first end portion (51 Fig. 1) slidably housed in a second seat (55 bore) and a second end portion (53) slidably housed in a first room (55 bore), the first end

portion (52 effective area) being shaped to close the exit of the bore (50) inside the second seat (55) when the third valve means are in the closed position.

With regard to claim 22, the second end portion (53) has an equivalent transversal section greater than an equivalent transversal section of the first end portion (51).

With regard to claims 23 and 24, the tool of Moraht et al. further comprising a third duct (102) for fluid communication between the first seat as shown in Figure 4 and the first room (55).

With regard to claims 25 and 26, the fourth valve means (56) has a hollowed portion housing the valve for fluid communication between the duct (58) and duct (58a) when the fourth valve means is in the transit position (Fig. 4).

With regard to claim 27, the base portion (40) of the first valve means (37) is slidably housed in a second room (39) which is in fluid communication with the second seat (valve housing).

With regard to claim 28, (New) The pneumatic machine according to claim 16 wherein the first valve means (37) has a closing portion (37a) shaped to cut off pressurized fluid flow when the first valve means are in the closing condition as shown in Figure 4, the closing portion (37a) having a smaller equivalent transversal section than an equivalent transversal section of the base portion (40).

With regard to claim 29, (New) The pneumatic machine according to claim 21 wherein the first valve means (37) comprise a lengthened and shaped element as shown in Figure 4, slidably housed inside a seat (30 bore) which has a first opening (22) for fluid communication with a third room (63a) that it is in fluid communication with the feed of pressurized fluid, a

second opening (chamber 65) intermediately located and connected to the duct (58) and an opening (not shown) for connecting with the external outlet.

With regard to claim 30, valve means (61) has an external portion (60), fit to match the trigger (26), and a lock portion (end portion), opposite to the external portion and fit for closing the opening (63a) of the seat (63) when the valve means (61) is in the closed position.

With regard to claim 32, Moraht et al. show a geometric axis of valve means (37) and of valve means (38) being nearly coincident and nearly parallel to an axis of the trigger valve means (61).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 18-20 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moraht et al. (US 3,547,003).

With regard to claim 18, Moraht et al.'s fourth valve means (56) lacks a hollowed portion for receiving a shaped free end of the trigger. The hollowed portion for receiving a shaped free end of the trigger is considered obvious engineering design preference because the trigger is not limited to a hollowed receiver. However, it would have been obvious matter of design choice to one skilled in the art to modify the tool of Moraht et al. to include hollowed portion for receiving the trigger, since applicant has not disclosed that having the hollowed

receiver solves any stated problem or has advantage and it appears that the trigger would perform equally well with any other receiver.

With regard to claims 19 and 20, although Moraht et al. lack elastic means for exerting a biasing force on the fourth valve means, but Moraht et al. teaches biasing compression spring (62) for exerting a biasing force on valve (61). Therefore, it would have been obvious to one skilled in the art to provide the Moraht et al.'s fourth valve with elastic biasing means in order return the valve in its seating position.

With regard to claim 31, although the geometric axis of the second valve means and of the fourth valve means of Moraht et al. are not mutually perpendicular; arranging both valves perpendicular relative each other provide no unexpected results, it involves only routine skill in the art. However, it would have been obvious to one skilled in the art to modify the valve parts of Moraht et al. arranged perpendicular relative each other since applicant has not stated that such arrangement improve the valve performance or has advantage.

***Claim Rejections - 35 USC § 103***

7. Claims 16-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howard Ramspeck (US3,547,003).

With regard to claim 16, Howard Ramspeck reference discloses a pneumatic fixing machine (10) comprising: a piston means (26), first valve means (60) in fluid communication with the tool cylinder (18) and exhaust port (19), a second valve means (77) operated by the trigger means (98), and movable between open position and closed position to connect pressurized fluid through at least first duct (44 Fig. 3), a fourth valve means (132) operated by the trigger (98) movable between open position and closed position to cut off supply of

pressurized fluid to the cylinder (18); the machine function to operate the piston as claimed as described on column 4, lines 67-75; column 5, lines 1-53.

Ramspeck's reference discloses the claimed invention except that valve means (60) is one piece integral valve unlike applicant's two piece of the same valve means which operates to supply pressurized fluid to the cylinder and exhaust port. However, it would have been obvious to one skilled in the art to make one piece valve into two pieces since mere duplication of essential working parts of a device involves only routine skill in the art.

With regard to claim 17, Ramspeck's valve means (132) further comprises a piston valve (134) slidable inside a chamber (130) considered to be a first seat and in flow connection to the cylinder (18) and at least a second duct (108, 152).

With regard to claim 18, Ramspeck's reference discloses valve means (132) considered to be the fourth valve means comprising a least an engaging element supporting the trigger means which meets the limitation of "hollow".

With regard to claim 19, Ramspeck's reference discloses elastic means (142) for exerting an elastic strength on the valve (132) when not actuated by the trigger.

With regard to claim 20, the elastic means of Ramspeck's reference lacks compression helical spring, however biasing valve means by helical spring is old and well known in the art and would have been obvious to one skilled in the art to have provided the elastic means of Ramspeck's reference as a helical spring to effectively bias and return the valve to the valve's seat. (see US 5,865,360 for example).

With regard to claim 21, Ramspeck's reference discloses valve means (60) comprising a stem (68) slidable within valve seat (62) and passageway (74), the first end (70) of the valve



means (60) being fitted to close off first duct (44) inside a seat adjacent passageway (74) which satisfies the limitation.

With regard to claim 22, Ramspeck's valve means (60) includes a portion (70) of transversal section as shown in Figure 3 which is greater than the second end of the valve means (60), the features of the valve means, as set for the above satisfy the limitation.

With regard to claims 23 and 24, the machine of Ramspeck further comprises duct (port 152) for flow connection between the chamber (130) and the inside cylinder (78), which satisfy the claimed limitation.

With regard to claims 25 and 26, Ramspeck's valve means (132) comprises a hollow (130) through which port (140) and 146) are connected in fluid communication when the valve is biased.

With regard to claim 27, the piston of the valve means (60) slidably contained inside valve cylinder (78) and in fluid communication with the passage (74), which satisfy the claimed limitation.

With regard to claim 28, the valve means (60) comprises a closing portion (section 70) having a smaller transversal section than the portion (72) of the valve means (60).

With regard to claim 29, Ramspeck's reference discloses a trigger valve (77) including elongated portion (84) sliding in chamber (93) provided with (passage (102) and in fluid communication with passage (106) connected to port (108) and exhaust port (19), satisfying the claimed limitation.

With regard to claim 30, a trigger valve (77) of Ramspeck comprises at external portion (circular end portion Fig. 3) fit to match the trigger means (98) and a lock portion (distal end

portion Fig. 3), opposite the external portion as shown in Figure 3, fit for close opening (94 passage) of the chamber (93) in the blocking position of the valve means (60).

With regard to claim 31, arranging the fluid cut-off valve and the trigger valve perpendicular relative each other provide no unexpected results, it involves only routine skill in the art. However, it would have been obvious to one skilled in the art to provide the valve parts in a desired arrangement, for example, arranging the fluid cut-off valve and the trigger valve perpendicular relative each since applicant does not state that such arrangement improve the valve performance.

With regard to claim 32, Ramspeck's valve means (60) and valve (77) are parallel to one another, which satisfy the claimed limitation.

### *Response to Arguments*

8. Applicant's arguments with respect to claims 16-32 have been considered but are moot in view of the new ground(s) of rejection.

### *Conclusion*

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Refer to attachment for notice of references cited and recommended for consideration based on their disclosure of limitations of the claimed invention.


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathaniel C. Chukwurah whose telephone number is (571) 272-4457. The examiner can normally be reached on M-F 6:00AM-2:30PM.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on (571) 272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NC

December 26,, 2007.



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